## REMARKS

Reconsideration and allowance of this application, as amended, are respectfully requested.

Claims 1-12 are amended to remove the informalities indicated by the examiner, by reciting a computer, which performs the functional operations originally recited. It is believed that the claims, as amended, overcome the 35 USC §102(b) rejections. Method claims 13-24 are added to correspond to claims 1-12, respectively. Upon addition of the method claims, we think that the original title becomes descriptive of inventions claimed. Therefore, the title is not amended at this time. If, in the Examiner's view, the title still requires amendment, applicant will do so.

Claims 1-12 stand rejected under the judicially created doctrine of obviousness type double patenting. The examiner seems to regard the claimed processing equations as obvious over those disclosed in USP No. 6,369,375. Applicant respectfully disagrees.

According to the present invention, the phase distribution  $\Phi(x,y)$  to be obtained by each equation is not equivalent of those in USP 6,369,375. What is to be sought for according to the present invention is a value obtained by:

$$\Phi'(x,y) / \{1- \Phi'(x,y)^2/2\}$$

where  $\Phi'(x,y)$  is equivalent to  $\Phi(x,y)$  of USP 6,369,375.

That is, in order to be compensate for,  $\Phi'(x,y)$ , which is first calculated out as a phase distribution, is further divided by 1-  $\Phi'(x,y)^2/2$ . This operation cannot be obviously introduced from USP 6,369,375.

As discussed above, the present invention is patentable over USP No. 6,369,375.

Appl. No. 09/664,723 Amdt. dated September 15, 2003 (Mon.) Reply to Office Action of March 14, 2003

All outstanding matters having been addressed, it is respectfully submitted that the present application is in a condition for allowance and a Notice to that effect is earnestly solicited.

Respectfully submitted,

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